

because the conflicting claims have not in fact been patented. Once allowable subject matter is deemed to exist in the present application by the Examiner, further review of the foregoing rejections will be appropriate, and if necessary, terminal disclaimers will be filed to overcome the obviousness-type double patenting rejections.

Turning to the art rejection of record, claims 61-97, the claims presently pending in the present application, are rejected under 35 U.S.C. §102, or in the alternative, under 35 U.S.C. §103 over Chapman et al. (U.S. Patent No. 5,019,660). For the following reasons, however, the Examiner's rejection is most respectfully traversed by Applicants.

The Examiner notes that Chapman et al. discusses diamondoids within a polymer composition. It is also noted that Chapman et al. does not set forth the properties of the composition, and thus the Examiner relies upon the inherent nature of the dielectric properties of the compounds/compositions to suggest that they would be anticipatory of the claimed low-k materials of the presently claimed invention. However, inherency requires that the compounds noted must be such, and that the dielectric properties must be present in the materials of Chapman et al. This is not the case.

It is the discovery of Applicants that in fact certain diamondoid polymerized materials can in fact meet the requirements of low-k material for electrically isolating the interconnection lines in vias other than the graded circuit. Not all such materials would necessarily meet the requirements of low-k material. As discussed in the specification beginning on page 33, line 17 through page 36, a low-k material generally has a dielectric constant lower than silicon dioxide, generally less than 4.0.

It was discovered that certain diamondoid materials, including diamondoid containing polymerized materials, could actually be able to be used as a low-k material because they do exhibit the necessary low dielectric constant. On page 35 of the present specification, beginning with line 19, particular examples are provided of materials which in fact can be low-k materials. These include polymers such as a polyamide or a polyaryl ether with a diamondoid containing material, or a polyamide diamondoid copolymer which may be fluorinated. Claim 62 in particular claims a material comprising a polymer containing a diamondoid and also a polyamide, polyaryl ether or polyamide group. Such polymers are not disclosed in Chapman et al., and one of ordinary skill in the art reading Chapman et al. would not in any manner be directed to the practice of Applicants claimed invention.

Accordingly, it is respectfully submitted that Chapman et al. does not anticipate or render obvious Applicants claimed invention. The necessity of inherency is not met by Chapman et al. with regard to identifying low-k materials as claimed in the presently claimed invention.

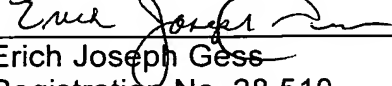
Accordingly, favorable reconsideration and withdrawal of the Examiner's rejection of claims 61-97 over Chapman et al. are respectfully requested.

By the present amendment, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

Respectfully submitted,

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